

**Monocrystalline PV modules
S5M of 155, 160, 165, 170 and
175 Wp.**

Product Certifications

Factory Inspection Certification according to GSE requirements.

Certified according to IEC 61215:2005 standard (manufacturing approval and design qualification).

Certified according to IEC 61730-1 and IEC 61730-2:2004 standard (electrical safety qualification).



Company Certifications



European manufacturing in its own facilities certified according to OHSAS 18001, ISO 14001 and 9001 standards.

Guarantees

10 years: materials.
10 years: 90% of the nominal power.
25 years: 80% of the nominal power.



Technical characteristics

High efficiency, of up to 13.98%, **with positive tolerances**. (-0, +5Wp).
Light module weighing 14.3 kg with encapsulated serial number.
Tempered solar glass, 3.2 mm thick with high transmissivity.



Key facts of Solaria

The only Spanish solar photovoltaic company listed on the Madrid Stock Exchange.
Vertically integrated company, with full control over the whole production process.
Design and production of monocrystalline and polycrystalline silicon cells.
Solaria intensively uses its modules in self operated plants and large facilities turnkey solutions for third parties.

Electrical characteristics of the S5M series (*)

		S5M155	S5M160	S5M165	S5M170	S5M175
Maximum power (-0,+5Wp)	P_{max}	155 Wp	160 Wp	165 Wp	170 Wp	175 Wp
Voltage at maximum power	V_{mpp}	34,52 V	34,86 V	35,69 V	35,75 V	36,16 V
Current at maximum power	I_{mpp}	4,49 A	4,59 A	4,62 A	4,77 A	4,84 A
Open circuit voltage	V_{oc}	43,50 V	43,71 V	44,22 V	44,37 V	44,45 V
Short circuit current	I_{sc}	4,95 A	5,08 A	5,11 A	5,16 A	5,18 A
Module efficiency	E_{fm}	12,39%	12,79%	13,19%	13,59%	13,98%

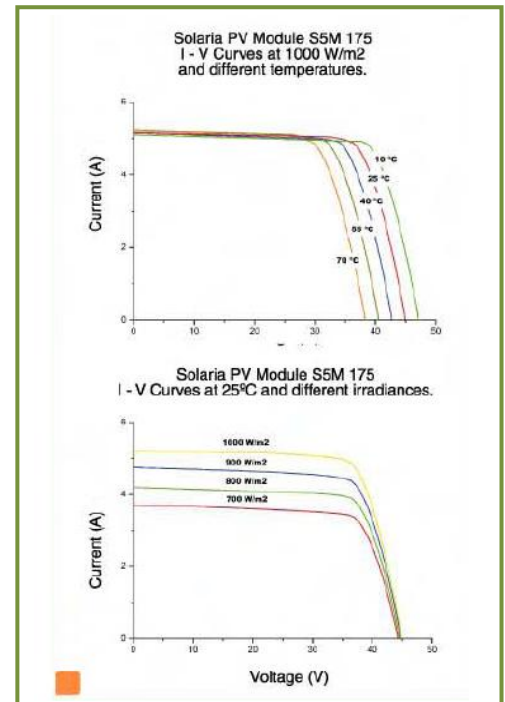
NOCT (800W/m ² , AM 1.5, 20°C, 1m/s)	47±2°C
Temperature coefficient of I_{sc}	+0,028%/K
Temperature coefficient of V_{oc}	-0,31%/K
Temperature coefficient of P_{max}	-0,48%/K
Maximum system voltage (IEC)	1000 V (Clase A)

Efficiency reduction in a partial loading performance: lower than 5% (200 W/m², 25°C).

(*) Electric values under Standard Test Conditions (STC) with an irradiation value of 1000W/m², at an AM 1,5 solar spectrum and a temperature of 25°C. The measurement tolerance of the electric parameters is ±2,5%

Constructive and dimensional characteristics

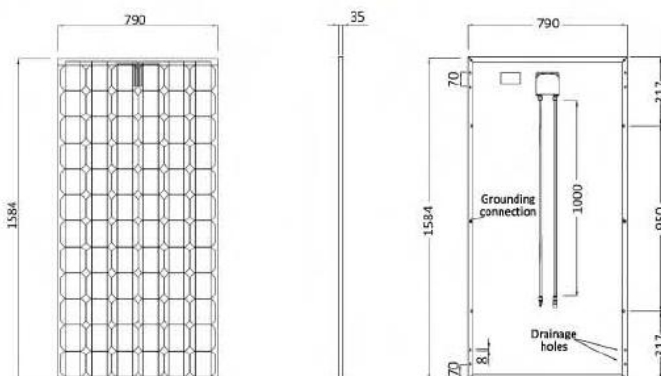
Dimensions (± 3 mm)	1584 x 790 x 35 mm.
Weight (Kg)	14,3 kg.
Solar Cells	72 cells of 5" quasi-squared, silicon, monocrystalline cells, texturised and antireflective coated. Connection: all the cells are connected in series and configured for an 6x12 matrix.
Construction	Front: high transmission tempered glass 3,2 mm thickness. Rear: insulating backsheet. Encapsulant: EVA (Ethylene-Vinyl-Acetate). Frame: Anodised aluminium with water drainage hole.



Electrical connections

Junction box	IP 65.
Protection diodes	Including removable by-pass diodes.
Connectors	100 cm long black solar cable and fast connectors IP67.

Mechanical characteristics



Distributor Stamp

Headquarters
C/Princesa 2-3ª planta
28008 Madrid- España.
T. +34 915644272
F. +34 915645440
contact@solariaenergia.com

Production Plants
Puertollano (Ciudad Real)
Fuenmayor (La Rioja)